

SEQUENCE LISTING

<110> LIAU, Gene
STEFANSSON, Steingrimur
SU, Joseph

<120> ENDOTHELIAL CELL SPECIFICALLY BINDING
PEPTIDES

<130> 4-32422A/GTI/USN

<140> 10/537,847

<141>

<150> PCT/EP03/014407

<151> 2003-12-17

<150> 60/434,258

<151> 2002-12-18

<160> 43

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 1

Cys Pro Asp Leu His His His Met Cys

1

5

<210> 2

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 2

Cys Leu Gly Gln His Ala Phe Thr Cys
1 5

<210> 3

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 3

Cys Ser Ser Asn Thr Ala Pro His Cys
1 5

<210> 4

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 4

Cys His Val Leu Pro Asn Gly Asn Cys
1 5

<210> 5

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 5

Cys Lys Pro Gly Ile Tyr Pro Ser Leu Cys
1 5 10

<210> 6

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 6

Cys Gln Thr Ala Arg Thr Pro Ala Cys
1 5

<210> 7

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 7

Cys Asn Gln Ser Gln Pro Lys His Cys
1 5

<210> 8

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 8

Cys Thr Pro Ser Lys Ile Ser Val Cys
1 5

<210> 9

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 9

Cys Val Ser Pro Gly Pro Arg Leu Cys
1 5

<210> 10

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 10

Cys Tyr Ala Leu Ser Gly Val Pro Cys
1 5

<210> 11

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 11
Cys Lys His Pro Pro Gln Pro Phe Cys
1 5

<210> 12
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 12
Cys His Gln Ser Lys Pro Leu Leu Cys
1 5

<210> 13
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 13
Cys Pro Gly Pro Phe Ser Asn Trp Cys
1 5

<210> 14
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 14
Cys Pro His Lys Thr His Leu Pro Cys
1 5

<210> 15
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 15
Cys Val Phe Pro Leu Ser His Tyr Cys
1 5

<210> 16
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 16
Cys Asn Met Ile Ala Pro Ser Ser Cys
1 5

<210> 17
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 17
Cys Thr Leu Gly Met Gln Phe Gln Cys
1 5

<210> 18
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 18
Cys Thr Asn Pro Thr Gly Met Leu Cys
1 5

<210> 19
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 19
Cys Ser Asn Met Ala Pro Arg Ser Cys
1 5

<210> 20
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 20

Cys Ser Met Ala Pro Asn Met Ser Cys
1 5

<210> 21

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 21

Cys Ser Asp Leu Thr Met Glu Ala Cys
1 5

<210> 22

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 22

Cys Pro Trp Pro Tyr Lys Tyr Ser Cys
1 5

<210> 23

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 23

Cys Phe Gly Gly Asn Phe His Arg Cys
1 5

<210> 24

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 24

Cys Leu Thr Thr Ser Gln Gln Thr Cys
1 5

<210> 25

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 25

Cys Thr Ala Asn Ser Gly Ser Phe Cys
1 5

<210> 26

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 26
Cys Gln Glu Pro Leu Asp Glu Ser Cys
1 5

<210> 27
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 27
Cys Gln Met Ser Met Phe Ala Arg Cys
1 5

<210> 28
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 28
Cys Pro Leu Thr Pro Lys Ala Tyr Cys
1 5

<210> 29
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE
<222> (1)...(9)
<223> Peptide Specific for Endothelial Cell Binding

<400> 29

Cys Asn Asn Ser His Thr Ala Leu Cys

1

5

<210> 30

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 30

Cys Leu Ser Ser Asp Ile Thr Leu Cys

1

5

<210> 31

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 31

Cys Leu Thr His Gly Pro Lys Tyr Cys

1

5

<210> 32

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 32

Cys Leu Gly Lys Asp Leu Arg Thr Cys
1 5

<210> 33

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 33

Cys Ala Pro Lys Thr His Pro Leu Cys
1 5

<210> 34

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 34

Cys Pro Thr Gly Leu Met Lys Tyr Cys
1 5

<210> 35

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 35

Cys Thr Trp Lys Ala Pro Leu Gln Cys
1 5

<210> 36

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 36

Cys Ser His Ile Leu Gly Pro Ser Cys
1 5

<210> 37

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence derived from human and animal
adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> PEPTIDE

<222> (1)...(9)

<223> Peptide Specific for Endothelial Cell Binding

<400> 37

Cys Leu Ser Thr Ser Gln Tyr Ser Cys
1 5

<210> 38

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial oligo sequence derived from human and
animal adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> misc_feature

<222> (1)...(34)

<223> Oligonucleotide containing the PD1 peptide and

overhangs for BclI and BsrGI sites

<400> 38
gatcaatgtc ctgacctaca ccaccacatg tggt 34

<210> 39
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificial oligo sequence derived from human and
animal adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> misc_feature
<222> (1)...(34)
<223> Oligonucleotide containing the PD1 peptide and
overhangs for BclI and BsrGI sites

<400> 39
gtacaacaca tgtggtggtg taggtcagga catt 34

<210> 40
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificial oligo sequence derived from human and
animal adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> misc_feature
<222> (1)...(33)
<223> Oligonucleotide that is synthesized to generate
fusion peptide for specific binding of the
targeting peptide to the target cell

<400> 40
ggcctgtcct gatcttcac atcatatgtg tgc 33

<210> 41
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Artificial oligo sequence derived from human and
animal adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> misc_feature
<222> (1)...(33)
<223> Oligonucleotide that is synthesized to generate
fusion peptide for specific binding of the
targeting peptide to the target cell

<400> 41
ggccgcacac atatgatgat gaagatcagg aca

33

<210> 42
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial peptide sequence derived from human and
animal adenovirus peptide sequences for binding to
endothelial cell surface molecules

<221> BINDING
<222> (1)...(13)
<223> Target peptide

<400> 42
Lys Leu Ala Lys Leu Ala Lys Lys Leu Ala Lys Leu Ala Lys
1 5 10

<210> 43
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus sequence for SEQ ID NOs 1-37, derived
from human and animal adenovirus peptide sequences
for binding to endothelial cell surface molecules

<221> VARIANT
<222> (1)...(9)
<223> Xaa = Any Amino Acid

<400> 43
Cys Xaa Xaa Pro Thr Pro Pro Xaa Cys
1 5